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10/713,734	11/13/2003	Kulvir Singh Bhogal	AUS920030636US1	2693

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Darcell Walker
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EXAMINER

BOTTS, MICHAEL K

ART UNIT PAPER NUMBER

2176

DATE MAILED: 12/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/713,734

Applicant(s)

BHOGAL ET AL.

Examiner

Michael K. Botts

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/13/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. This document is the first Office Action on the merits. This action is responsive to the following communications: The Non-Provisional Application, which was filed on November 13, 2003, and an Information Disclosure Statement (IDS), which was also filed on November 13, 2003.
2. Claims 1-31 have been examined, with claims 1, 15, 19, and 23 being the independent claims.
3. Claims 1-31 are rejected.

Information Disclosure Statement

4. An initialed and dated copy of applicant's IDS form 1449, which was filed on November 13, 2003, is attached to this Office Action.

The Specification

5. Applicant is required to update the status (pending, allowed, etc.) of all parent priority applications in the first line of the specification. The status of all citations of U.S. filed applications in the specification should also be updated where appropriate.

Claims Rejections – 35 U.S.C. 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Turau, Volker, "A Framework for Automatic Generation of Web-Based Data Entry Application Based on XML," Proceeding of the 2002 ACM Symposium on Applied Computing, ACM Press, March 2002 [hereinafter "Turau"].

Regarding **dependent claim 1**, Turau teaches:

A computer implemented method for selecting rules from a rules repository to validate information submitted on an electronic form comprising the steps of:

a) creating a validation rules repository on a computer;

(See, Turau, teaching decomposition of the a web-based e-commerce based application to a "Wizard" with a business logic layer containing the business rules and data.)

b) in response to receiving a connection request, establishing a connection with the created rules repository; and

(See, Turau, teaching, that the system is used with "any web server." See, Turau, Figure 2 and page 1125.)

c) in response to receiving a rule request, retrieving the selected rule from the rules repository for incorporation into the electronic form.

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(See, Turau, page 1125, teaching that the code is initialed by a dedicated servlet and the “wiz.xml” file builds the internal representation of the specification.)

Regarding **dependent claim 2**, Turau teaches:

The method as described in claim 1 further comprising before said retrieving step (c), the step of displaying at least one rule from the rules repository in response to a rule request.

(See, Turau, “Listing 5,” and “Figure 3,” displaying rules for entry of credit card information.)

Regarding **dependent claim 3**, Turau teaches:

The method as described in claim 2 wherein said step (a) further comprises establishing a plurality of categories of rules and storing the rules in the plurality of categories according to rule type.

(See, Turau, page 1123, teaching “rules-elements” and attributes.)

Regarding **dependent claim 4**, Turau teaches:

The method as described in claim 3 wherein rule categories comprise alphabet and number categories.

(See, Turau, page 1124, teaching “range-elements,” which define the set of legal values, and see “Listing 3” teaching “range elements” of zip code entered as 5 digits comprised of digits from 0-9, and teaching entry of “months.”)

Regarding **dependent claim 5**, Turau teaches:

The method as described in claim 3 wherein rule types comprise name, zip code, telephone number, city, state and address, and credit card number.

(See, Turau, pages 1124-1126, and Listings 3 and 4, teaching rules for entry of address, street, city, and credit card. It is implicit from the address and credit card information that a rule is taught to be able to create a rule for entry of a name and a telephone number.)

Regarding **dependent claim 6**, Turau teaches:

The method as described in claim 3 wherein said displaying step further comprises displaying a category of validation rules.

(See, Turau, "Listing 5," teaching the "credit card" category, with "card number" and "credit card type" sub-categories.)

Regarding **dependent claim 7**, Turau teaches:

The method as described in claim 6 further comprising before said displaying step, the step of receiving the rule request containing an identification of a specific validation rules category.

(See, Turau, "Listing 5" and Figure 3, showing the view from "Listing 5.")

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Regarding **dependent claim 8**, Turau teaches:

The method as described in claim 7 wherein said displaying step further comprises displaying only rules from the identified validation rules category.

(See, Turau, Listings 2-5.)

Regarding **dependent claim 9**, Turau teaches:

The method as described in claim 8 wherein said rule retrieval step further comprises receiving an identification of a rule in the specific validation rules category and retrieving the identified rule from the rules repository.

(See, Turau, Listings 2-5.)

Regarding **dependent claim 10**, Turau teaches:

The method as described in claim 1 wherein said step (c) further comprises the steps of:

- receiving a description of a desired rule;*
- searching the repository for rules matching the rule description;*
- displaying all rules matching the rule description; and*
- retrieving a rule selected from the displayed rules matching the rule description.*

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(See, Turau, Listing 3, teaching declarations of ranges associated with particular rules. See also, Turau, Listing 1 teaching descriptions of the rules in the Wizard DTD.)

Regarding **dependent claim 11**, Turau teaches:

The method as described in claim 1 further comprising before said step (c) the steps of:

- receiving a validation rule description;*
- searching the rules repository for rules matching the rule description;*
- determining whether there are any rules that match the validation rule description;*
- sending a query to the user to create a new rule when no rule matches the validation rule description; and*
- retrieving a newly created rule.*

(See, Turau, Listing 1 and the description of the Wizard, and the Wizard history-object, which permits a user to create a new rule.)

Regarding **dependent claim 12**, Turau teaches:

The method as described in claim 11 further comprising the step of storing the newly created rule in the rule repository.

(See, Turau, page 123, and Listing 1, teaching the store function of the wizard.)

Regarding **dependent claim 13**, Turau teaches:

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The method as described in claim 1 further comprising after said step (c), the step of incorporating the retrieved rule into the electronic form.

(See, Turau, Listing 5 and Figure 3.)

Regarding **dependent claim 14**, Turau teaches:

The method as described in claim 13 wherein said incorporating step further comprises:

*identifying a field in the electronic form;
attaching the selected rule to the identified form field; and
retrieving validation software for the attached rule.*

(See, Turau, Listing 5 and Figure 3.)

Regarding **dependent claim 15**, Turau teaches:

A computer implemented method for creating a repository for rules to validate information submitted on an electronic form comprising the steps of:

creating electronic form validation rules;

(a) creating a record for each identified validation rule, the record containing a plurality of fields with information about the rule and a link to software that performs the validation of that rule on information in an electronic form that incorporates that rule;

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(b) storing the record for an identified validation rule and the corresponding software for that validation rule in the rule repository; and

(c) repeating the above steps for each newly created rule.

(See, Turau, teaching the Wizard. See also, Turau, Listing 1 teaching excerpts from the Wizard, including citations to rules. See also, Turau, teaching the class "WizardHistory" and storage of rules. The ability to repeat the rules creation and storage steps is inherent in the ability to create them and the fact that many rules are specifically referenced and discussed.)

Regarding **dependent claim 16**, Turau teaches:

The method as described in claim 15 further comprising the step of creating a set of sub-directories in the rule repository, each sub directory would contain at least two categories of validation rules and a plurality of validation rule types under each rule category.

(See, Turau, listings 1-5, and see specifically Listing 5, teaching the "credit card" action and the sub-categories of "card number," and "credit card type" along with validation rules for each sub-category.)

Regarding **dependent claim 17**, Turau teaches:

The method as described in claim 16 wherein rule types comprise name, zip code, telephone number, city, state and address, and credit card number.

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(See, Turau, Listings 4 and 5, teaching address, city, zip code, and credit card number. Name and telephone number rules are inherent from the number and text data in the address, city, zip code, and credit card number rules noted above.)

Regarding **dependent claim 18**, Turau teaches:

The method as described in claim 17 further comprising the step of identifying a rule type for a newly created rule.

(See, Turau, pages 1123-1124, teaching that new attributes, rules, and rule elements can be created and combined.)

Regarding **dependent claim 19**, Turau teaches:

A system for selecting rules to validate information submitted on an electronic form comprising:

- (a) a repository for storing electronic form validation rules;*
- (b) a computing device connected to said validation rules repository, said computing device capable of interfacing with said repository for the purpose of retrieving form validation rules for incorporation into electronic forms; and*
- (c) an interface connected to said computing device and said validation rules repository for facilitating communication between said repository and said computing device.*

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(See, Turau, Figures 1 and 2, teaching a system including the business logic repository, and interfaces for retrieving information and communicating between the repository and the computing device.)

Regarding **dependent claim 20**, Turau teaches:

The system as described in claim 19 wherein said repository comprises a set validation rule sub-directories in which the rules are stored, said directories being based on categories of validation rules.

(See, Turau, pages 1123-1126, teaching the directories and subdirectories for the validation rules. See also, Turau, Listing 1-5, also teaching the subdirectories.)

Regarding **dependent claim 21**, Turau teaches:

The system as described in claim 20 wherein each validation rule stored in the repository comprises a record containing a description of the requirement that rule enforces and a pointer to the location in repository of software that executes the validation of that rule on an electronic form.

(See, Turau, Listings 1-5, teaching the rules and the pointers.)

Regarding **dependent claim 22**, Turau teaches:

The system as described in claim 19 wherein said interface is a computing network.

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(See, Turau, teaching the Wizard as a framework for use in a “web-based data entry application.”)

Regarding **dependent claim 23**, Turau teaches:

A computer program product in a computer readable medium for selecting rules from a rules repository to validate information submitted on an electronic form comprising:

- a) instructions for creating a validation rules repository on a computer;*
- b) in response to receiving a connection request, instructions for establishing a connection with the created rules repository; and*
- c) in response to receiving a rule request, instructions for retrieving the selected rule from the rules repository for incorporation into the electronic form.*

(See, Turau, pages 1121-1126, and specifically, see Turau, Listing 5 and Figure 3.)

Regarding **dependent claim 24**, Turau teaches:

The computer program product as described in claim 23 further comprising before said retrieving instructions (c), instructions for displaying at least one rule from the rules repository in response to a rule request.

(See, Turau, Listing 5 and Figure 3.)

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Regarding **dependent claim 25**, Turau teaches:

The computer program product as described in claim 24 wherein said instructions (a) further comprise instructions for establishing a plurality of categories of rules and instructions for storing the rules in the plurality of categories according to rule type.

(See, Turau, Listings 1-5.)

Regarding **dependent claim 26**, Turau teaches:

The computer program product as described in claim 23 wherein said displaying instructions further comprise instructions for displaying a category of validation rules.

(See, Turau, Listing 5 and Figure 3.)

Regarding **dependent claim 27**, Turau teaches:

The computer program product as described in claim 26 further comprising before said displaying instructions, instructions for receiving the rule request containing an identification of a specific validation rules category.

(See, Turau, Listings 2-5.)

Regarding **dependent claim 28**, Turau teaches:

The computer program product as described in claim 23 wherein said retrieving instructions (c) further comprise:

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instructions for receiving a description of a desired rule, the description containing the rule category;

instructions for searching the repository for rules matching the rule description;

instructions for displaying all rules matching the rule description;

and

instructions for retrieving a rule selected from the displayed rules matching the rule description.

(See, Turau, Wizard, and see specifically, page 1125, teaching rule classes.)

Regarding **dependent claim 29**, Turau teaches:

The computer program product as described in claim 23 further comprising before said retrieving instructions (c):

instructions for receiving a validation rule descriptor;

instructions for searching the rules repository for rules matching the rule description;

instructions for determining whether there are any rules that match the validation rule description;

instructions sending a query to the user to create a new rule when no rule matches the validation rule descriptor; and

instructions retrieving a newly created rule.

(See, Turau, teaching the Wizard for rule creation and rule re-use.)

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Regarding **dependent claim 30**, Turau teaches:

The computer program product as described in claim 23 further comprising after said retrieving instructions (c), instructions for incorporating the retrieved rule into the electronic form.

(See, Turau, Listing 5 and Figure 3.)

Regarding **dependent claim 31**, Turau teaches:

The computer program product as described in claim 30 wherein said incorporating instructions further comprise:

instructions for identifying a field in the electronic form;
instructions for attaching the selected rule to the identified form field; and
instructions for retrieving validation software for the attached rule.

(See, Turau, 1125-1126, specifically Listing 5 and Figure 3, with the validation software instructions inherent in the validation error message on Figure 3, stating: "Please supply credit card number" and in the teaching of the error message.)

7. It is noted that any citations to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the references should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. See, MPEP 2123.

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Conclusion

8. The following prior art is made of record and not relied upon that is considered pertinent to applicants' disclosure:

Lee, et al. (U.S. Patent 6,535,883 B1), teaching validation rules through a tree structure.

Katsumata, et al. (U.S. Patent 6,301,591 B2), teaching data validation of forms.

Blando (U.S. Patent 6,185,583 B1), teaching verification of data in forms with rules and rules sets.

Wright, Jr. (U.S. Patent 5,704,029), teaching computerized forms and validation.

Sandler (U.S. Patent Application Publication 2005/0210370 A1), teaching validation of form filing data through comparison to a data set.

Dziejma (U.S. Patent Application Publication 2005/0028084 A1), teaching validation form filing data via a network connection.

Paoli, et al. (U.S. Patent Application Publication 2004/0268229), teaching validation of hierarchical form data.

Scholz, et al. (U.S. Patent Application Publication 2003/0078949 A1), teaching validation of form filing input.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael K. Botts whose telephone number is 571-272-5533. The examiner can normally be reached on Monday Thru Friday

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8:00-4:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on 571-272-4136. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MKB

William D. Bashore
WILLIAM BASHORE
PRIMARY EXAMINER
12/11/2005